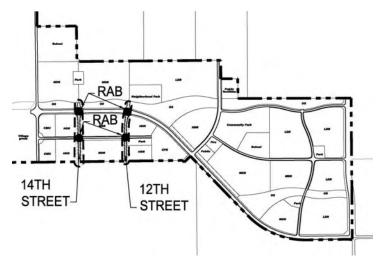
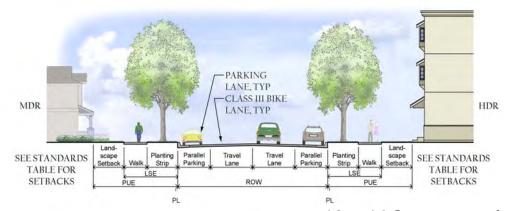


C Street – between 12<sup>th</sup> & 14

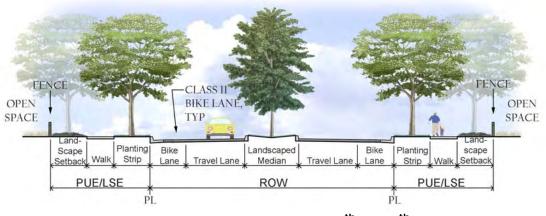
## 12<sup>th</sup> and 14<sup>th</sup> Streets



12th and 14th Streets are north-south collectors providing the main connections from the University Village and the North Village to University Boulevard. South of University Boulevard, the two-lane roadways provide parallel parking on both sides and Class III bicycle routes. Class II on-street bicycle lanes are provided north of University Boulevard to the northern boundary of the open space.



12 & 14 Street - south

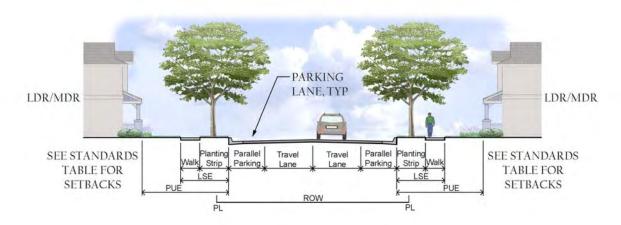


12th & 14th Street - north

#### Local Streets

Local streets in the Community Portion of the Plan Area are two-lane roadways with on-street parking and separated sidewalks. In addition, the design guidelines require the use of single loaded roadways adjacent to open space areas, encourage a modified grid street system within the University Village, and includes neighborhood entry elements.

The pattern of local streets will be determined through the subdivision map process. It is anticipated that a majority of local streets will be public, although private gated roadways may be proposed. Gated roadways are only permitted where mechanisms are included to ensure maintenance of private streets and emergency access and when the gating of a neighborhood does not preclude public access to parks, schools or open space areas. Gated subdivisions are not permitted within Parcels 18, 19, 20 or 21. Through road connections are encouraged between developments. These internal connections will enhance local circulation and assist in minimizing the number of connections to collector and arterial roadways. Additional street sections, such as alleys, may be considered through the subdivision map process. See the RUSP Development Standards and Design Guidelines, for additional information.



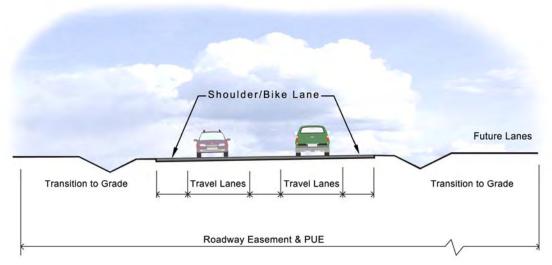
Local Street - typical

#### 6.3.5 Off-Site Roads

#### ♦ Watt Avenue

The RUSP will construct an extension of Watt Avenue, initially as a two-lane arterial, from University Boulevard south to Base Line Road. The RUSP will subsequently widen the off-site portion of Watt Avenue from two to four lanes, or provide the project's "fair share" contribution should another development project be required to construct improvements to Watt Avenue before the RUSP triggers the need for additional improvements. Exhibit 6-3 schematically depicts the proposed alignment of Watt Avenue.

Off-site improvements to Watt Avenue north of the Plan Area will consist of a sewer maintenance road, extending from the terminus of Watt Avenue, serving a dual purpose as an emergency access to Phillip Road, which is an existing roadway.



Watt Avenue - offsite

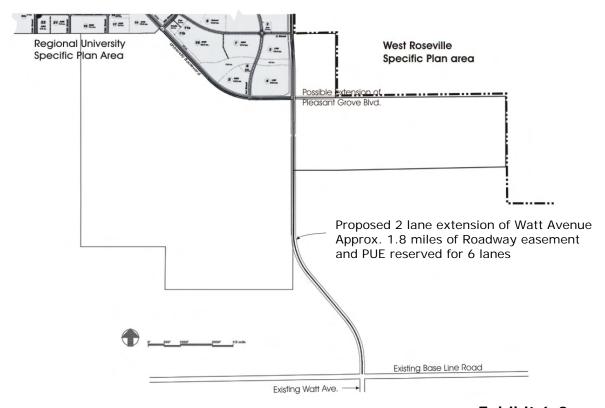
#### Brewer Road

Brewer Road is adjacent to the western edge of the Plan Area, and the Specific Plan proposes no direct access to Brewer Road. Emergency access to the faculty/staff housing complex will be provided via an access road from the housing area to Brewer Road, north to Phillip Road. As a result, no improvements are proposed to Brewer Road as part of the Specific Plan.

#### Off-Site Improvements

Additional off-site improvements may be required and are addressed in the RUSP EIR. Potential off-site improvements will also be evaluated for other major connections such as Pleasant Grove Boulevard and Blue Oaks Boulevard. Specific obligations relating to off-site improvements are addressed in the RUSP Development Agreement.

All additional circulation improvements within the University will be private and are not included herein.



**Exhibit 6-3 Proposed Watt Avenue Extension** 

## 6.3.6 Emergency Vehicle Access

#### ♦ Primary Emergency Vehicle Access (EVA)

The RUSP shall construct a 2-lane all weather, surface EVA starting from the northeast corner of the RUSP, north to connect to existing Phillip Road. From this point, the EVA uses existing Phillip Road at the future intersection of Watt Avenue easterly for a distance of 7,800 feet to the intersection of West Side Drive, at the northeast corner of the Pleasant Grove Wastewater Treatment Plant. From that intersection, existing City of Roseville roads connect through the West Roseville Specific Plan easterly to Fiddyment Road.

Portions of the 7,800-foot length of existing Phillip Road to be used as the EVA do not currently meet Placer County flood protection standards. Those portions of Phillip Road subject to flooding will be improved by upsizing existing culverts and elevating some lengths of the existing roadway to protect from the 100-year storm event. All drainage improvements will be consistent with the Placer County Storm Water Management Manual. Please see Exhibit 6-2 for EVA location.

## **♦ Secondary Emergency Vehicle Access (EVA)**

A secondary EVA is required by the Placer County Fire Department, (PCFD), from Brewer Road to the University (Parcel 30). This access will be gated with security access to emergency vehicles. No improvements to Brewer Road are required for secondary EVA access to the RUSP. Please see Exhibit 6-2 for EVA location.

#### 6.3.7 Circulation Phasing

Phasing of circulation improvements is addressed in Section 10.4.

#### 6.3.8 Placer Parkway

Placer County and the South Placer Regional Transportation Authority (SPRTA) are studying alternative route alignments for Placer Parkway, a controlled access roadway facility linking SR 65 in Placer County to SR 70/99 in Sutter. At the time of Specific Plan approval, no alignment had been adopted. Four potential alignments near the Plan Area have been identified:

- Two alignments north of the Plan Area
- An alignment running diagonally through the Plan Area, and
- An alignment running through the eastern portion of the Plan Area and then to the south and west.

The RUSP anticipates an alignment of Placer Parkway north of the Plan Area.

## 6.3.9 Intersection Improvements

Traffic control devices will be installed at intersections within the RUSP in a phased manner based on traffic volumes. Stop sign control (i.e., either side street stop, or multi-way stop control) will be applied at internal intersections until conditions warrant the installation of a traffic signal. It is anticipated that stop sign control will be adequate at all internal intersections during the earliest development phases of the Community area, prior to development of the University. Exhibit 6-4, Intersection Improvements, depicts the locations of the proposed traffic control devices.

#### **♦ Traffic Signals**

Traffic signals will be installed, as warranted, at the following intersections.

- University Boulevard/Watt Avenue
- University Boulevard/1<sup>st</sup> Street
- University Boulevard/8<sup>th</sup> Street
- University Boulevard/Parcel 13/14
- A Street/Watt Avenue
- B Street/Watt Avenue
- Modification of existing signal at Baseline Road/ Watt Avenue to add 4<sup>th</sup> leg.

#### Roundabouts

Roundabouts are proposed in six locations where two-lane streets intersect and would otherwise require some form of stop control. The use of roundabouts at these locations provides traffic calming and results in better traffic operations. However, future modifications of roundabouts to other forms of control are not precluded if conditions warrant. Roundabouts are proposed at the following intersections:

- 1<sup>st</sup> Street/A Street
- 12<sup>th</sup> Street/University Boulevard
- 14<sup>th</sup> Street/University Boulevard
- 16<sup>th</sup> Street/University Boulevard
- 12<sup>th</sup> Street/C Street
- 14<sup>th</sup> Street/C Street

#### Side Street Stops

Side street stops will be installed at the following intersections:

- 1<sup>st</sup> Street at B Street
- A Street at 8<sup>th</sup> Street
- B Street at 8<sup>th</sup> Street
- C Street at 16<sup>th</sup> Street

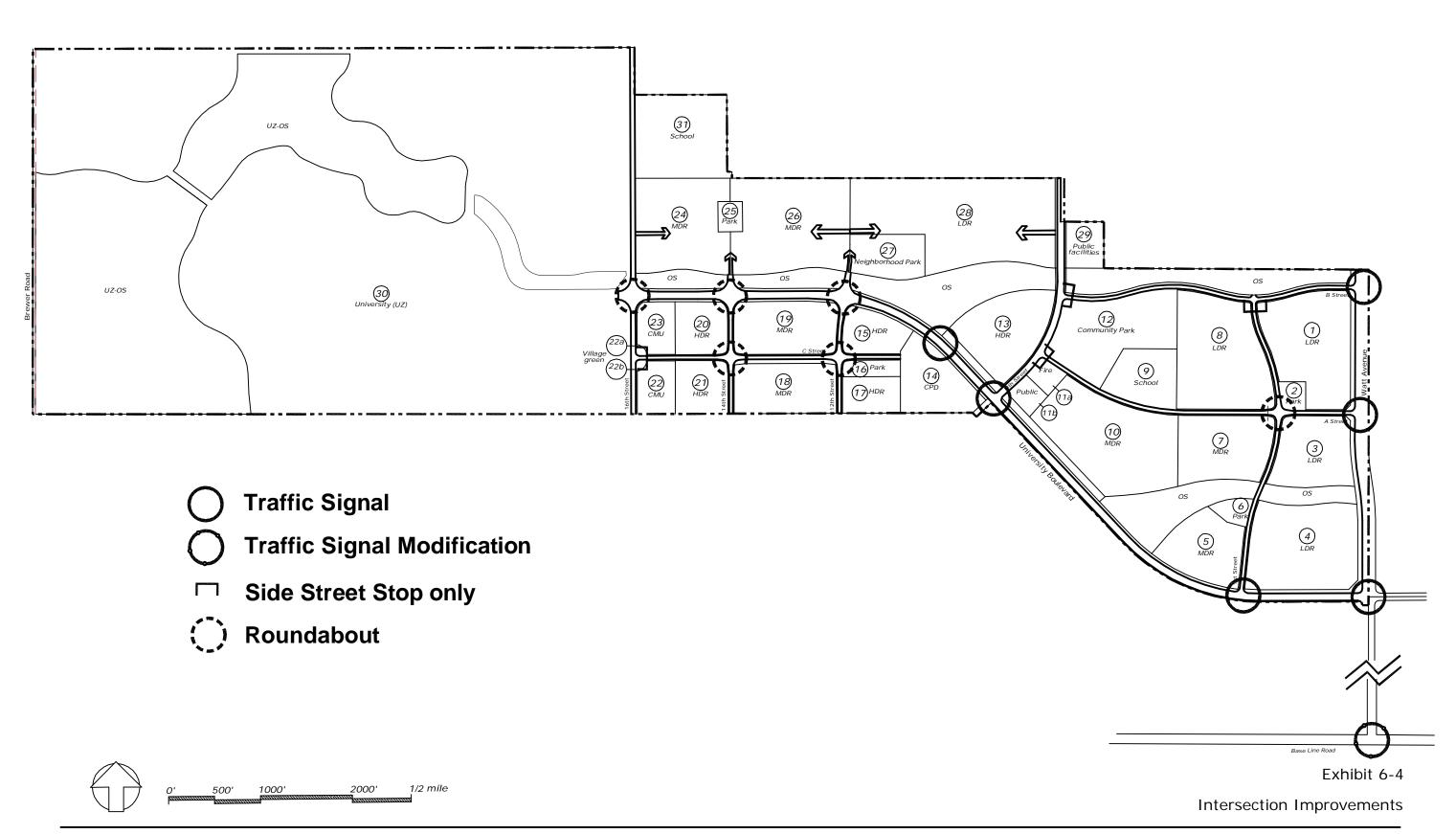
# 6.3.10 Traffic Calming

The purpose of traffic calming measures is to create livable neighborhoods by managing traffic volumes and speeds. Traffic calming measures should be applied where appropriate within the University Village and on other local streets to soften the impact of motor vehicles. Traffic calming devices that can be applied include traffic circles, bulb outs and raised intersections. Traffic circles are raised islands installed in the middle of an intersection to provide a physical and visual break in the roadway, which can reduce vehicle speeds if designed to physically deflect traffic through an intersection. Bulb outs are pedestrian enhancements that shorten the pedestrian crossing distance at intersections or mid-block crossings through a narrowing of the street, typically by eliminating parking. Raised intersections provide for reduced speeds and pedestrian enhancements through a raised profile where roadways approach an intersection, operating similarly to flat top road humps. Locations and sizes of roundabouts and other traffic calming measures shall accommodate Fire Department vehicle requirements.

# **6.3.11 Neighborhood Electric Vehicles**

The RUSP roadway system has been designed to allow the safe and convenient use of neighborhood electric vehicles (NEV's) as defined by the Department of Transportation National Highway Traffic Safety Administration. These vehicles are efficient, particularly for local trips and reduce the consumption of fossil fuels, have zero emissions at the point of use and are less noisy than gas/diesel vehicles. Neighborhood electric vehicles can be used on all roadways with a speed limit of 35 miles per hour or less.

# Intersection Improvements



Regional University Specific Plan

Circulation Element

## 6.4 Public Transportation

The Specific Plan is designed to be supportive of transit through an integrated land use and circulation plan. Public transit is most effective when stations are surrounded by compact urban development that is connected to the stations with a good pedestrian network. These key elements are all included in the Specific Plan. The transit center adjacent to the University Village, is surrounded by transit-oriented development that includes a mix of uses in a compact form. Other potential transit stops are also identified at key locations. Refer to Exhibit 6-5 for transit stop locations. The intent of the transit stops is to accommodate the following variety of bus transit services:

- Demand Responsive Service
- Local Fixed-Route Service
- Commuter Service
- Enhanced Bus service
- Bus rapid transit (BRT) service

The South Placer County Conceptual Bus Rapid Transit (BRT) Plan, Placer County, April 2005 contains specific land use criteria and design guidelines intended to assist in creating land use plans supportive of potential future transit investments. To support a frequent, high-quality BRT service, the BRT Plan recommends the following land use density and intensity thresholds.

- Residential density of 9.0 dwelling units per acre within ¼ to ½ mile radius of the transit centers
- Non-residential intensity floor-area-ratio (FAR) of 1.0

The Specific Plan provides an overall residential density of 10 dwelling units per acre. The Specific Plan maintains a FAR of 0.45 within ¼ mile of the transit center located on 16<sup>th</sup> Street. This FAR is higher than the typical Placer County suburban commercial centers, which average 0.20 to 0.25 FAR. The proximity of the University next to the university transit center is also desirable because students have a higher propensity to use transit.

The BRT Plan also highlights a potential alignment that would extend north along Watt Avenue in Sacramento County through the Plan Area and turning eastward to serve potential stations in new growth areas such as Placer Ranch as well as existing station areas such as the Galleria Mall. Sacramento County and Regional Transit (RT) are considering Watt Avenue for future BRT service that would provide direct transfers to light rail transit (LRT) at the I-80/Watt Avenue LRT station.

The Placer County General Plan designates Watt Avenue (from Sacramento County to the Blue Oaks Boulevard Extension) and the Blue Oaks Boulevard Extension as arterial transit corridors. The transit corridor designation is intended to ensure the viability of high-capacity transit in those corridors where there is a significant amount of undeveloped land. The arterial transit corridors would have transit access almost continuously along the corridor where development is present. These arterial corridors could have future dedicated lanes for transit and the Plan Area has proposed sufficient right-of-way for this condition. Only four lanes are

needed to accommodate project traffic at build out, but the Plan area proposes to dedicate right-of-way for up to six lanes on Watt Avenue and two future BRT lanes.

Exhibit 6-5 shows a transit center is planned for the following location,

• <u>University Transit Center:</u> at the southwest corner of University Boulevard and 16<sup>th</sup> Street, located immediately adjacent to the campus and across from the University Village. The University Transit Center is planned as an off-street facility with space for up to four bus berths.

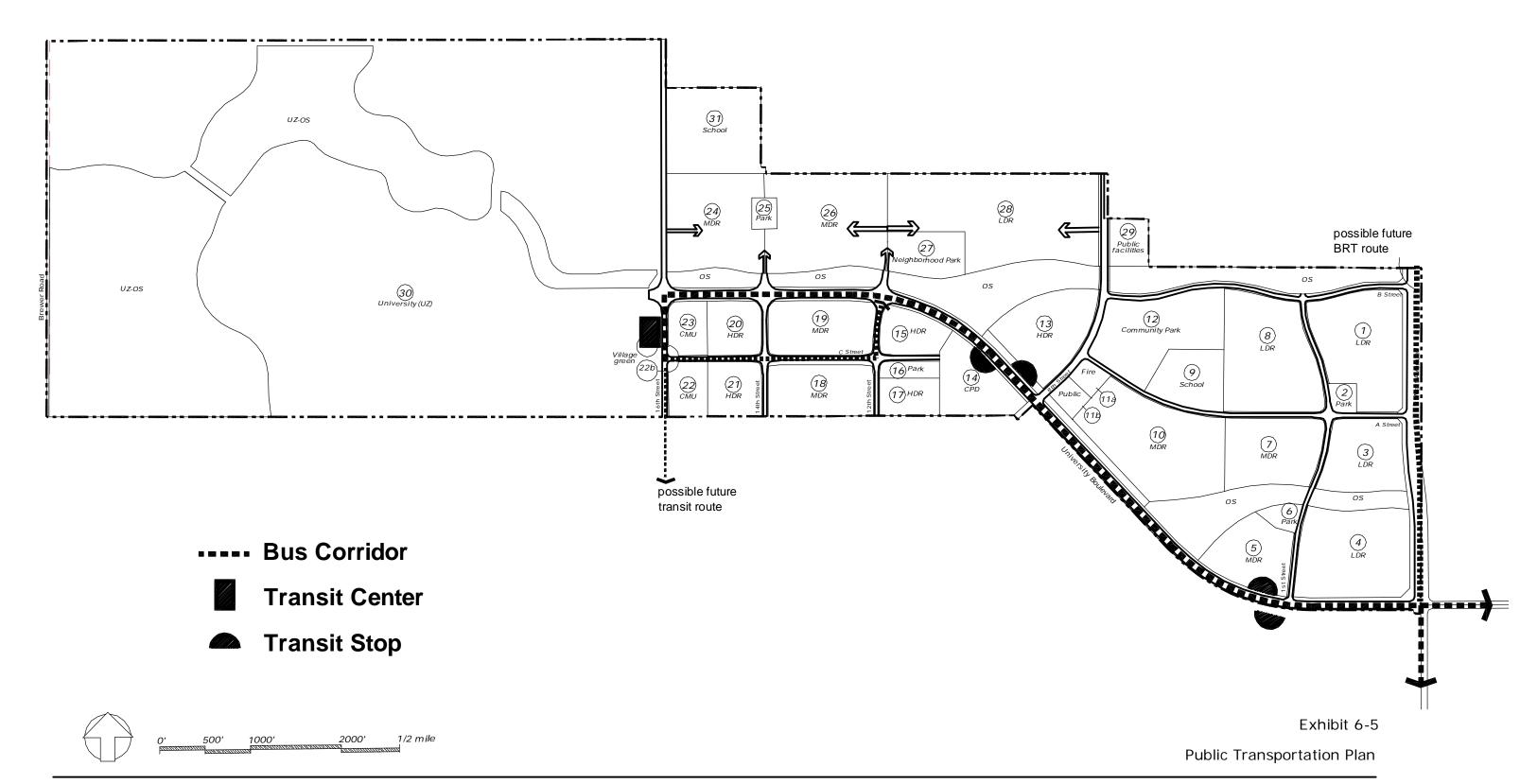
On-street bus stops are also planned along University Boulevard at 8<sup>th</sup> Street headed westbound, along University Boulevard at Parcel 14 headed eastbound, and along University Boulevard at 1<sup>st</sup> Street with pullouts being located at the far side of the intersection (e.g., northwest and southeast corners). On-street bus stops will be constructed to County standards.

It is anticipated that the earliest transit service to the Plan Area will be provided via Watt Avenue. The provision of transit service will be determined by Placer County based on ridership demand and funding availability.

## 6.4.1 Transit Operations and Funding

The Specific Plan provides physical right-of-way for potential future transit, but does not identify the details associated with future transit operations, funding, and service. The County continues to coordinate transit-planning efforts to develop more detail on future transit service needs and costs, including the West Placer Transit Plan, the Placer County Long Range Transit Plan and the BRT Implementation Plan. At this time, it is appropriate to preserve right-of-way for future transit options as identified in the Specific Plan.

# **Public Transportation Plan**



Regional University Specific Plan 6-23 Circulation Element

#### 6.5 Transportation Systems Management

Goal 3.C of the General Plan's Transportation and Circulation Element promotes the following goal: "Maximize the efficient use of transportation facilities so as to:

- Reduce travel demand on the county's roadway system;
- Reduce the amount of investment required in new or expanded facilities;
- Reduce the quantity of emissions of pollutants from automobiles; and
- Increase the energy-efficiency of the transportation system."

General Plan policies related to this goal promote the use of TSM programs to reduce vehicular travel demands and to meet air quality goals related to non-residential projects. Consistent with these policies, a Transportation System Management (TSM) plan shall be prepared on an individual project by project basis consistent with the requirements of the County's Trip Reduction Ordinance.

## 6.6 Bicycle and Pedestrian System

## 6.6.1 Bicycle System

There are three basic types of bikeway facilities as defined by the Placer County Bikeway/ Trails Master Plan, Class I (Multi-use Trail), II and III. Exhibit 6-6 depicts the bicycle and pedestrian system in the Plan Area. The Specific Plan provides approximately 6.3 miles of Class I (Multi-use Trail) bike paths through the provision of multi-use trails, 3.4 miles of Class II bike lanes and 1.1 miles of Class III bike routes.

#### ♦ Multi-use Trail

Multi-use trails are off-street paths completely separated from the traveled roadways for the exclusive use of bicycles and pedestrians. Multi-use trails are located in a separate easement. The paths shall be a minimum of 10 feet in width and shall be



constructed of a hard surface such as asphalt or concrete. The multi-use trail facilities are shown on Exhibit 6-6.

# ♦ Class II Bicycle Lanes

Class II bicycle lanes are 4.5' wide, on-street lanes designed for one-way use of bicycles. The bike lane is typically located adjacent to the shoulder or gutter in a widened portion of the street. Class II bicycle lanes will be located within the street right-of-way and delineated with signing and striping. Class II routes are shown on Exhibit 6-6.

#### ♦ Class III Bicycle Routes

Class III bicycle routes are on-street routes along local public streets where bicyclists do not have a delineated lane, and must share the roadway with motorists. Class III routes are designated by signs and are shown on Exhibit 6-6.

# 6.6.2 Pedestrian System

The pedestrian system provides sidewalks for the exclusive use of pedestrians. Typically, these facilities are separated sidewalks along local and collector roadways. A significantly wider pedestrian system is provided along the University Village CMU frontage due to the anticipated high pedestrian activity. Other pedestrian facilities such as paseos may be included within individual neighborhoods. Exhibit 6-6 shows the location of these pedestrian facilities.

#### University Village

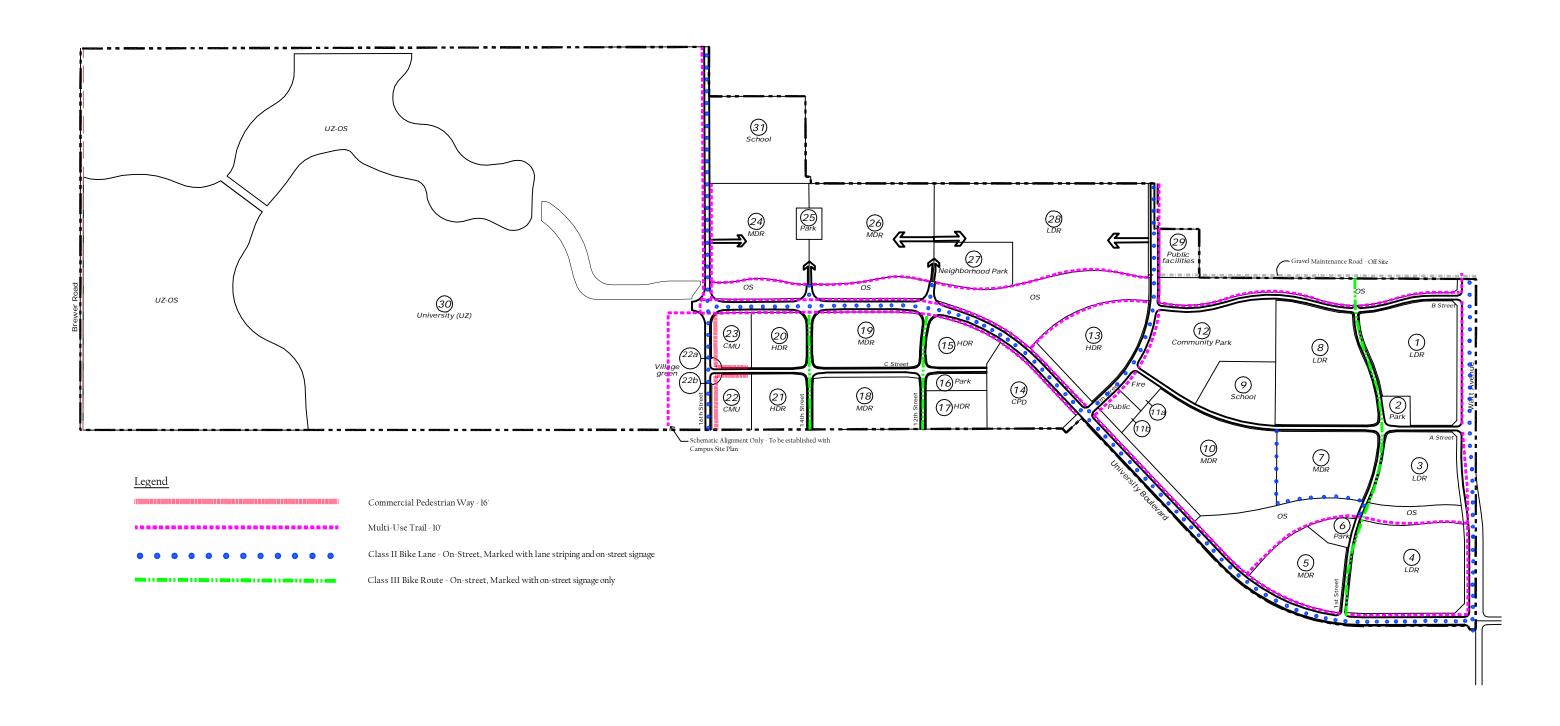
Sixteen-foot concrete sidewalks are located along the Parcel 22 and 23 frontage of the University Village Plaza. Tree wells are integrated into the walks, and buildings are placed immediately behind the walks to promote pedestrian activity and allow commercial uses, such as small eating areas and displays to extend out onto the sidewalk. Refer to page 6-9 for 16<sup>th</sup> Street section.



#### ♦ Separated Sidewalks

5-foot to 6-foot concrete separated sidewalks, with a landscaped buffer between the roadway edge and sidewalk, are located along the remaining collector and local streets.

# Pedestrian & Bicycle Plan





0' 500' 1000' 2000

Exhibit 6-6
Pedestrian & Bicycle Plan

# Section 7 Environmental Resources Element

# 7.1 Purpose

This section identifies environmentally sensitive resources found within the Plan Area and anticipated offsite improvement areas, and outlines procedures and principles to guide the conservation, protection or mitigation of these resources, some of which will be impacted with the development of the Plan Area. A comprehensive discussion of biological resources within the Plan Area and in the off-site improvement areas is provided in the consolidated biological resources assessment report. This Environmental Resources element focuses on the three key resources of the Plan Area; wetlands, special-status species, and cultural resources. Potential resources within the Plan Area include rice fields, pasture and potential habitat for endangered species. The significance of any potential impacts to these resources, as well as any associated mitigation measures that may be required, are addressed in the Regional University Specific Plan EIR impact analysis and are therefore not addressed further in this Specific Plan. The features existing on the site in pre-development condition are depicted in Exhibit 2-2. Post-development open space is depicted in Exhibit 9-1.

#### 7.2 Resource Protection Goals

The protection of valuable resources within the Plan Area was a guiding factor in the development of the land use plan, and is a key concept for sustainable community design. Although a portion of the Plan Area is in active agricultural production, it does contain environmentally sensitive areas including wetland resources, natural and channelized creek corridors, and special-status species and their habitats. There are no native oak woodlands located in the Plan Area.

The land use plan designates a series of contiguous open space areas to preserve wetland and open space resources while allowing for potential connectivity with larger scale conservation efforts. This approach allows for protection of existing sensitive habitats with the Plan Area and provides opportunities to mitigate Plan Area impacts.

In addition to resource protection, the designated open space areas play a significant role in defining the visual character of the Specific Plan Area and provide for passive recreation opportunities, pedestrian and bike access, storm drainage, flood water conveyance, backbone sewer infrastructure and land use buffering.

# 7.3 Agricultural Lands

All of the non-wetland areas of the Plan Area have been significantly modified to support agricultural uses. At the time of Specific Plan approval there were approximately 664 acres in active rice production, 297 acres in abandoned rice

<sup>&</sup>lt;sup>1</sup> Consolidated Biological Resources Assessment for the Regional University Site and Off-site Improvements, Placer County, California. Foothill Associates, November, 2006.

farming, and 126 acres in dryland farming which have been worked sporadically over the previous five years. Agricultural productivity on the RUSP site is limited by the soils. The RUSP site includes 155 acres with soil Capability Class III and 1,002 acres with soil Capability Class IV. Class III soils have severe limitations for agricultural production and Class IV soils have very severe limitations for agricultural production.<sup>2</sup>

According to the 2000-2002 California Department of Conservation (CDC) Farmland Mapping and Mitigation Program (FMMP), the RUSP project site contains 518 acres of Farmland of Local Importance, 564 acres of Unique Farmland, and 75 acres of Farmland of Statewide Importance.<sup>3</sup> However, there is an inconsistency between the FMMP mapping and the actual land use of the site. The area classified as Farmland of Statewide Importance corresponds to the historical meandering creek corridors in the eastern two-thirds of the site. However, these corridors were straightened prior to 1993 and converted to channelized agricultural ditches. The adjacent land was graded, bermed, and converted to rice fields at the same time.

#### 7.4 Grassland Habitat

There is no undisturbed grassland habitat within the Plan Area. The abandoned agricultural lands are in varying stages of converting to non-native grasslands and forbs which are characterized by both the topographic and vegetative influence of the past agricultural practices.

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<sup>&</sup>lt;sup>2</sup> U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS). 1980. *Soil Survey of Placer County, California Western Part.* 

<sup>&</sup>lt;sup>3</sup> California Department of Conservation, Division of Land Resource Protection, California Farmland Conservation Report 200-2002

<sup>&</sup>lt;a href="http://www.consrv.ca.gov/DLRP/fmmp/pubs/2000\_2002/FMMP\_00-02\_fcr.htm">http://www.consrv.ca.gov/DLRP/fmmp/pubs/2000\_2002/FMMP\_00-02\_fcr.htm</a> (December 5, 2005)

#### 7.5 Wetland Resources

The Plan Area is situated within the Pleasant Grove Creek and Curry Creek watersheds. These ephemeral, intermittent creeks have historically flowed with winter rainfall and run dry during the summer months, although small surface pools may remain into the dry season. Agricultural practices in the eastern portion of the Plan Area, which includes summer irrigation for rice production, have resulted in these creeks and adjacent wetlands becoming more perennial in character. Irrigation runoff from urban development is expected to maintain this perennial condition.

Wetlands and other waters of the United States were identified within the Plan Area and offsite areas based upon aerial photograph interpretation and field surveys conducted by Foothill Associates during 2003-2006. Wetlands and other aquatic habitats within the Plan Area include seasonal wetlands (depressional and riverine), seasonal marsh (depressional and riverine)\_, perennial marsh (riverine) and perennial drainages, vernal pools, ditch/canals and a pond. Wetland acreages, locations and classification described herein are estimated only, suitable for Estimated acreages of both on and off-site jurisdictional planning purposes. wetlands are located in Table 7-1. Exhibit 7-1 shows the onsite Preliminary RUSP Wetland Assessment. Offsite wetland assessments are depicted on the following exhibits, Exhibit 7-2 Preliminary Offsite Wetland Assessment (North) and Exhibit 7-3 Preliminary Offsite Wetland Assessment (South). The improvements planned for these areas include the Watt Avenue extension, EVA route, transitional grading and sewer and water infrastructure. No wetland features are found within Offsite A improvement area where the proposed offsite detention/ retention basin will be located.

# 7.5.1 Wetland Types

#### ♦ Seasonal Wetlands and Vernal Pools

In the Plan Area, seasonal wetlands and vernal pools are located west of the active rice fields in an area formerly farmed for rice and dryland crops. During winter and spring these wetlands are seasonally inundated habitats found within annual grassland habitats. Given the extensive agricultural history of the site, most seasonal wetlands and vernal pools in the Plan Area are the result of reformation of wetland habitat following



Vernal Pool

cessation of active agriculture. In addition, some vernal pools in the southwestern portion of the site were constructed as compensatory mitigation for other off-site projects in the early 1990's. These pools are protected by a conservation easement, and are located within the proposed University open space preserve.

Vernal pools are characterized as shallow depressions underlain by a water-restricting layer, which causes them to become inundated during the rainy season. Vernal pools are dominated by native annual and perennial plant species that are adapted to winter-wet conditions. Seasonal wetlands are less frequently inundated than vernal pool habitat and are primarily dominated by non-native plant species.

Dominant plant species found in the vernal pools on site include coyote thistle, annual hairgrass, stipitate popcorn flower, woolly marbles, and whiteheaded navarretia. Two special-status plant species, the state-listed Boggs Lake hedge-hyssop and the CNPS List 2 dwarf downingia are known to occur in some pools, both natural and constructed, in the southwestern portion of the site.

Seasonal wetlands typically support such plant species as annual hairgrass, Mediterranean barley, perennial ryegrass, curly dock, annual bluegrass, and rabbits foot.

Some vernal pools within the Plan Area were surveyed in the past for aquatic invertebrates. Species that were found in vernal pools included clam shrimp, seed shrimp and several aquatic insects such as predaceous diving beetles, crawling water beetles, back swimmers and water fleas. There are also known occurrences of vernal pool fairy shrimp, an Endangered Species Act (ESA) Endangered Species, in the southwestern portion of the site.

# Preliminary Wetland Assessment

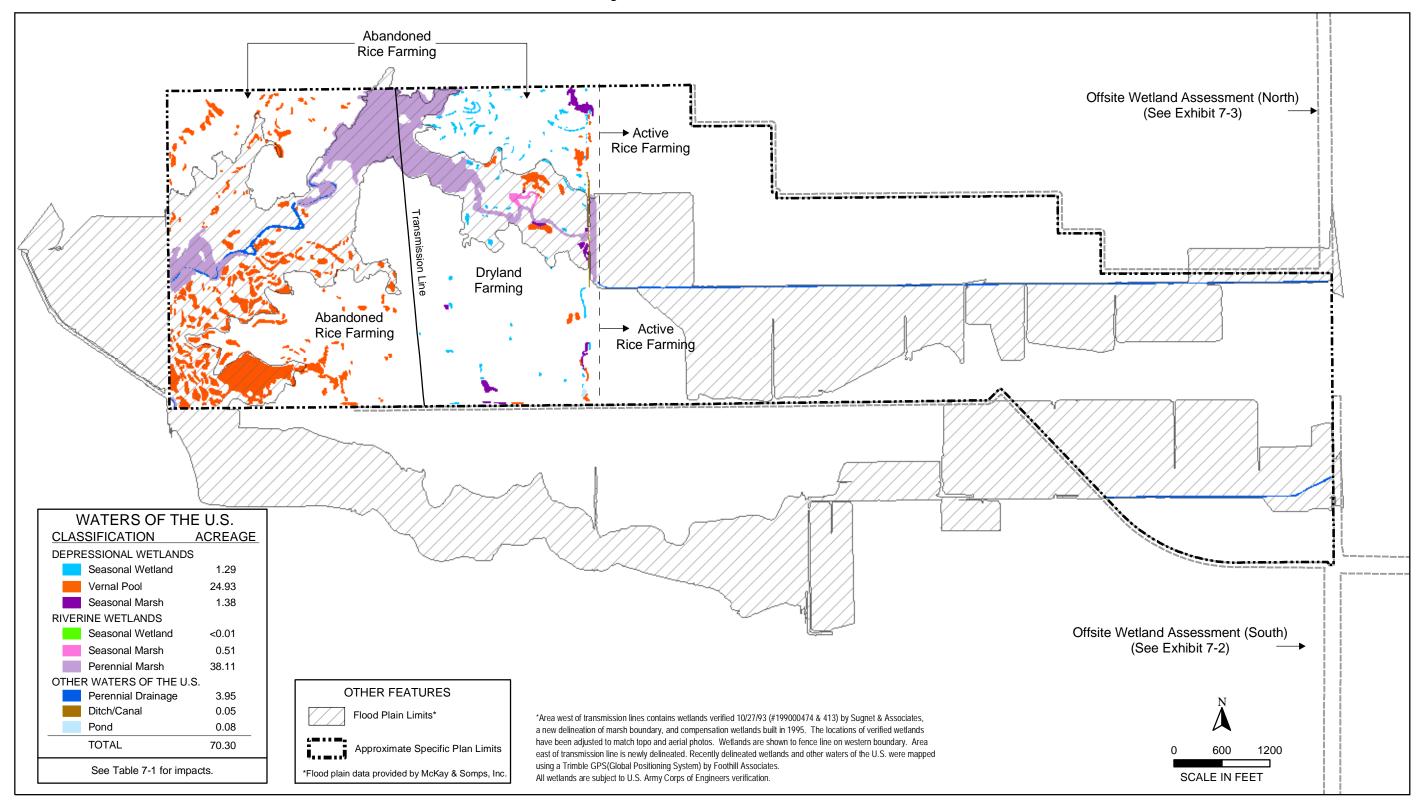


Exhibit 7-1
Preliminary Wetland Assessment

# Preliminary Offsite B Wetland Assessment

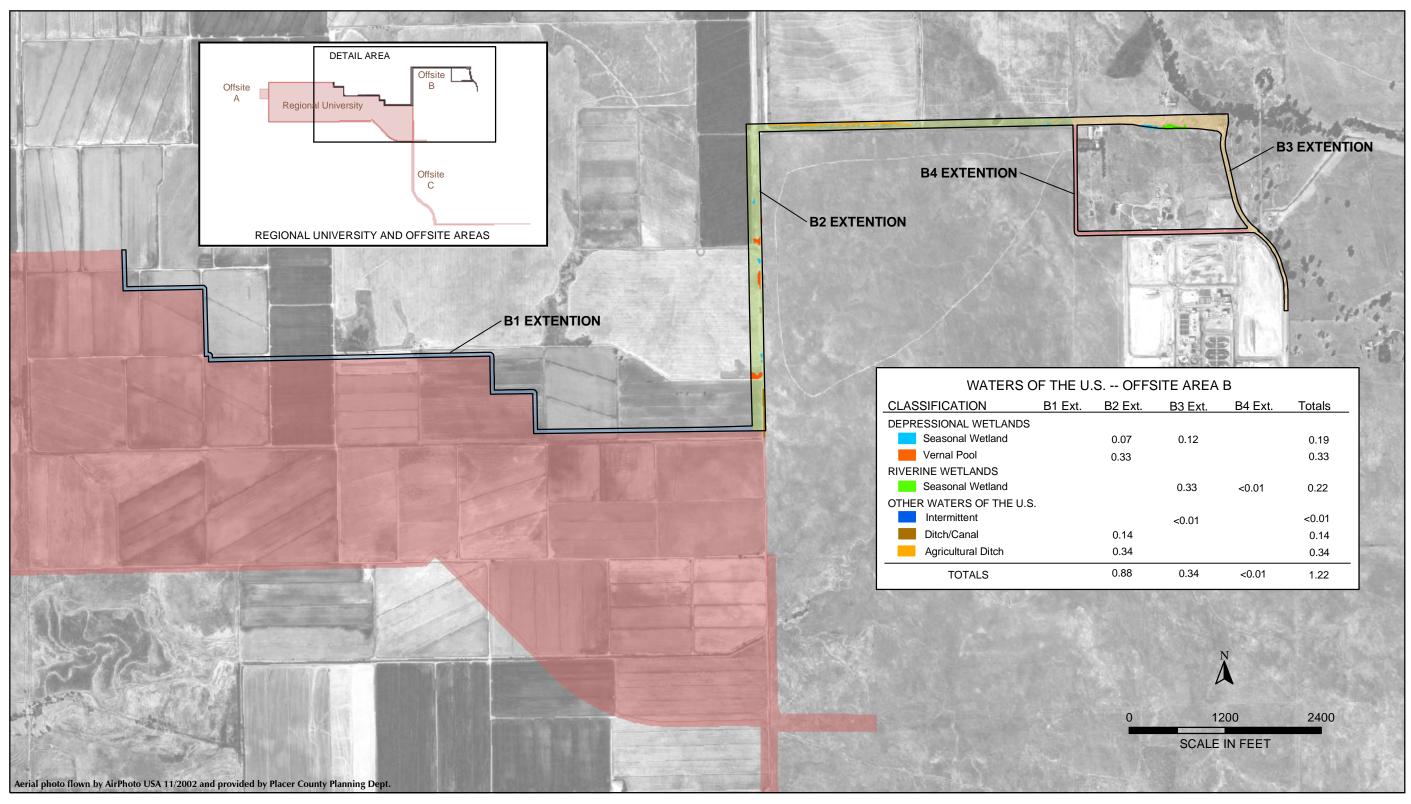


Exhibit 7-2
Preliminary Wetland Assessment

# Preliminary Offsites C & A Wetland Assessment

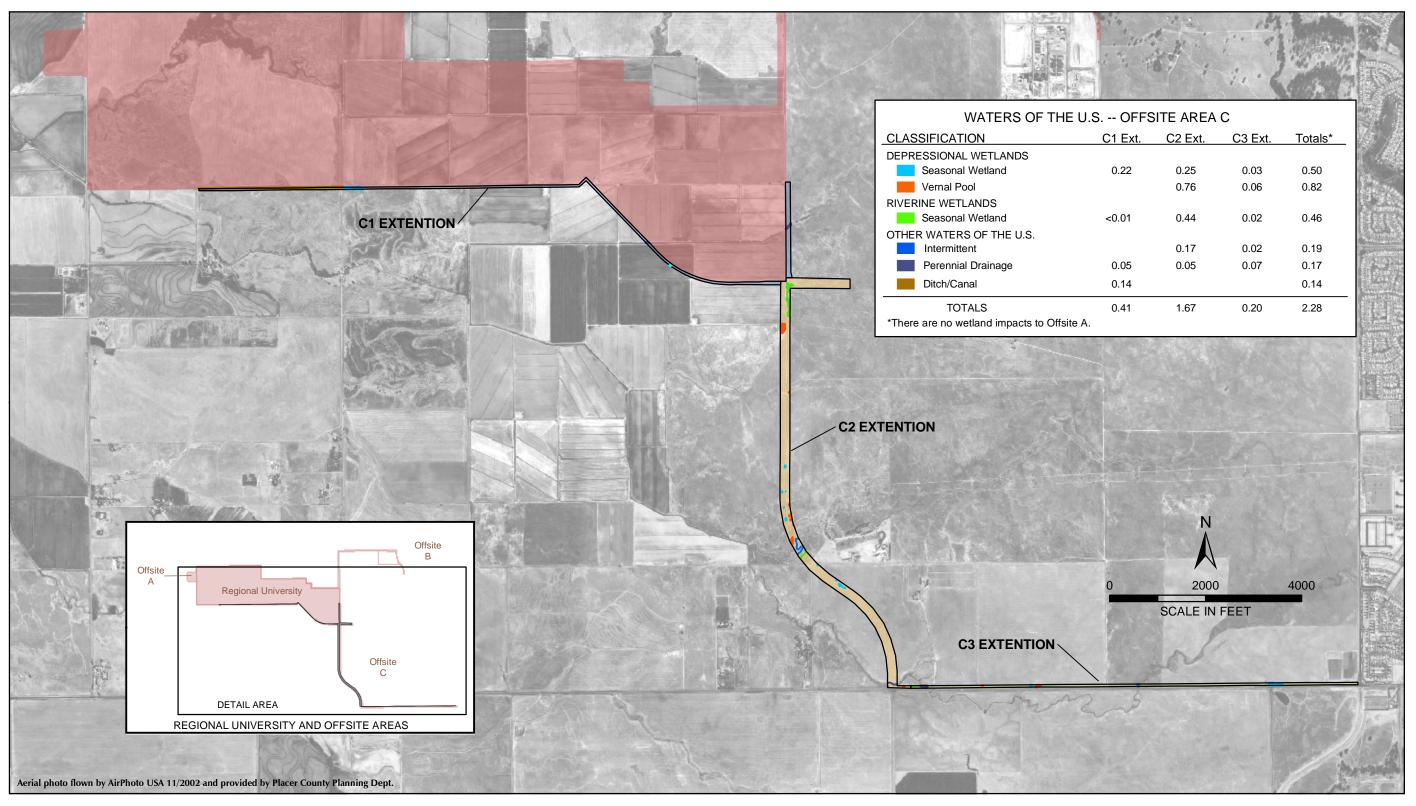


Exhibit 7-3
Preliminary Wetland Assessment

#### ♦ Perennial Drainage

The two channelized drainages, herein referred to as the North and South Tributaries of Curry Creek, represent the realignment and channelization of natural meandering creeks. These channels are currently used to convey irrigation runoff from the rice fields. These are excavated channels, deeply incised, with steep, near vertical sides. They are regularly maintained and support such vegetation as cattails, spreading rush, and dallis grass.



**Perennial Drainage** 

In the western portion of the site, the old creek channel associated with the North Tributary has largely been overgrown by cattails and spreading rush, supported by the presence of summer irrigation runoff. While the creek channel is occasionally visible, in many places the channel and channel margins have become marsh habitat and the channel is less distinct.

The channelized drainages on the site have the potential to provide water, food, shelter and breeding habitat for many species of wildlife. Common wildlife species including resident and migratory birds, amphibians, and foraging mammals are expected to utilize the drainage channels on the site.

#### Seasonal and Perennial Marsh

Marsh habitat in the Plan Area is dominated by cattails, bulrushes, rice cutgrass, and spreading Perennial rush. marsh habitats are associated with the perennial drainages and remain inundated most or all of the year, with winter rains providing the water source in winter and irrigation runoff providing water the durina summer. Seasonal marsh habitats are found both adjacent to the perennial drainage and in scattered locations in the



Seasonal Marsh

western portion of the Plan Area. Seasonal marsh habitats are supported, in part, by irrigation runoff. Within the perennial marsh habitat in the northwestern portion of the site, a beaver dam has resulted in rising water levels, resulting in the flooding of adjacent upland habitat.

Small, sparse stands of woody riparian vegetation occur in association with the channelized creek and marsh habitats. Riparian trees such as arroyo willow, narrow-leaved willow, shining willow, and Fremont's cottonwood occur here. The associated under story consists of woody and herbaceous plant species such as Himalayan blackberry, dallis grass, Johnson grass, willow weed and lady's thumb.

Riparian areas provide habitat for a variety of wildlife. Bird species observed or expected to occur in the riparian habitat in association with the marsh habitat include green-backed heron, great egret, northern harrier, red-tailed hawk, barn owl, song sparrow, black phoebe, yellow-rumped warbler, spotted towhee and American goldfinch. Common mammal species expected to occur in this habitat type include raccoon and striped skunk.

## 7.6 Special-Status Species

Special-status species are plant and animal species that have been afforded special recognition by Federal, state, or local resource agencies or organizations. Listed and special-status species are of relatively limited distribution and may require specialized habitat conditions.

Special-status species known to occur in the Plan Area include Bogg's Lake Hedge-Hyssop, Dwarf Downingia, vernal pool fairy shrimp, and various species of raptors, such as hawks and owls. Swainson's hawk has the potential to occur within the site because there is suitable foraging habitat for this species; however, nesting is not likely. Although no Swainson's Hawk have been observed, portions of the site may be considered potential foraging habitat for this species since they are known to nest within 5 miles of the site.

Additional discussion of special-status species that could potentially occur in the Plan Area are more fully discussed in the consolidated biological resources assessment report $^4$ .

# 7.7 Wetland Preservation/Compensation

Development of the Plan Area will result in impacts to wetland resources both within the Plan Area and offsite, as well as result in the preservation of existing wetland resources within the Plan Area. Table 7-1 summarizes the estimated acreage of preserved and potentially impacted Plan Area wetlands by type. A total of approximately 70.30 acres of wetlands or other "waters of the U.S." occur within the pre-development Plan Area. It is estimated that development of the Plan Area will preserve 51.65 acres (73%) of Plan Area jurisdictional wetlands. It is estimated that 18.65 acres (27%) will be directly impacted. In addition, offsite impacts associated with the extension of Watt Avenue, installation of an EVA route, a sewer main, and water lines may directly impact another approximately 3.50 acres. Wetland resource types potentially impacted by offsite improvements are

<sup>&</sup>lt;sup>1</sup> Consolidated Biological Resources Assessment for the Regional University Site and Off-site Improvements, Placer County, California. Foothill Associates, March, 2006.

the same types as those impacted within the Plan Area, therefore may be mitigated in the same manner as onsite impacts.

Table 7-1 Preliminary Wetlands Acreage Summary

Category	Acres			
Wetlands	Onsite Impact	Onsite Preserved	Offsite Impact*	Total
Seasonal Wetland	1.29	0.00	1.37	2.66
Vernal Pool	6.29	18.64	1.18	26.11
Seasonal Marsh	1.89	0.00	0.00	1.89
Perennial Marsh	6.96	31.15	0.00	38.11
Other Waters of the US				
Intermittent Drainage	0.00	0.00	0.19	0.19
Perennial Drainage	1.99	1.96	0.12	4.07
Ditch/Canal	0.05	0.00	0.64	0.69
Pond	0.08	0.00	0.00	0.08
TOTAL	18.55	51.75	3.50	73.80 acres

<sup>\*</sup>Offsite areas analyzed include the Watt Avenue road alignments south of the Plan Area, and infrastructure and EVA improvements and offsite grading north, south and east of the Plan Area. No impacts are associated with the offsite detention/retention basin west of the Plan Area.

Placer County policy requires that development projects result in no-net loss of wetland function. Wetland preservation avoids or reduces the necessity to construct compensatory wetland habitat, while fills of wetland habitat may be mitigated through a combination of onsite and or offsite wetland restoration and/or construction of compensatory wetland habitat. The purchase of mitigation bank credits may also be used to mitigate such impacts.

Because vernal pools may contain species listed under the federal Endangered Species Act, impacts to vernal pools typically require an incidental take permit from the U.S. Fish and Wildlife Service. Such impacts are usually mitigated through a combination of preservation of existing vernal pool habitat and restoration of disturbed or degraded vernal pool habitat or construction of new vernal pool habitat. All Section 404, incidental take and other required permits will need to be secured prior to any development activity within the Plan Area that would impact such resources.

#### 7.7.1 Wetland Preservation

Development of the Plan Area will include preservation of approximately 51.65 acres of wetland habitat and approximately 245 acres of open space corridors. Preserved wetlands are primarily located in the southwest corner of the Plan Area as shown on Exhibit 7-4, and consist of vernal pool habitat, of which approximately 6 acres are constructed vernal pools. Additional vernal pool restoration may be accommodated within this preserve area.

# Wetland Preserve and Compensation/Restoration Areas

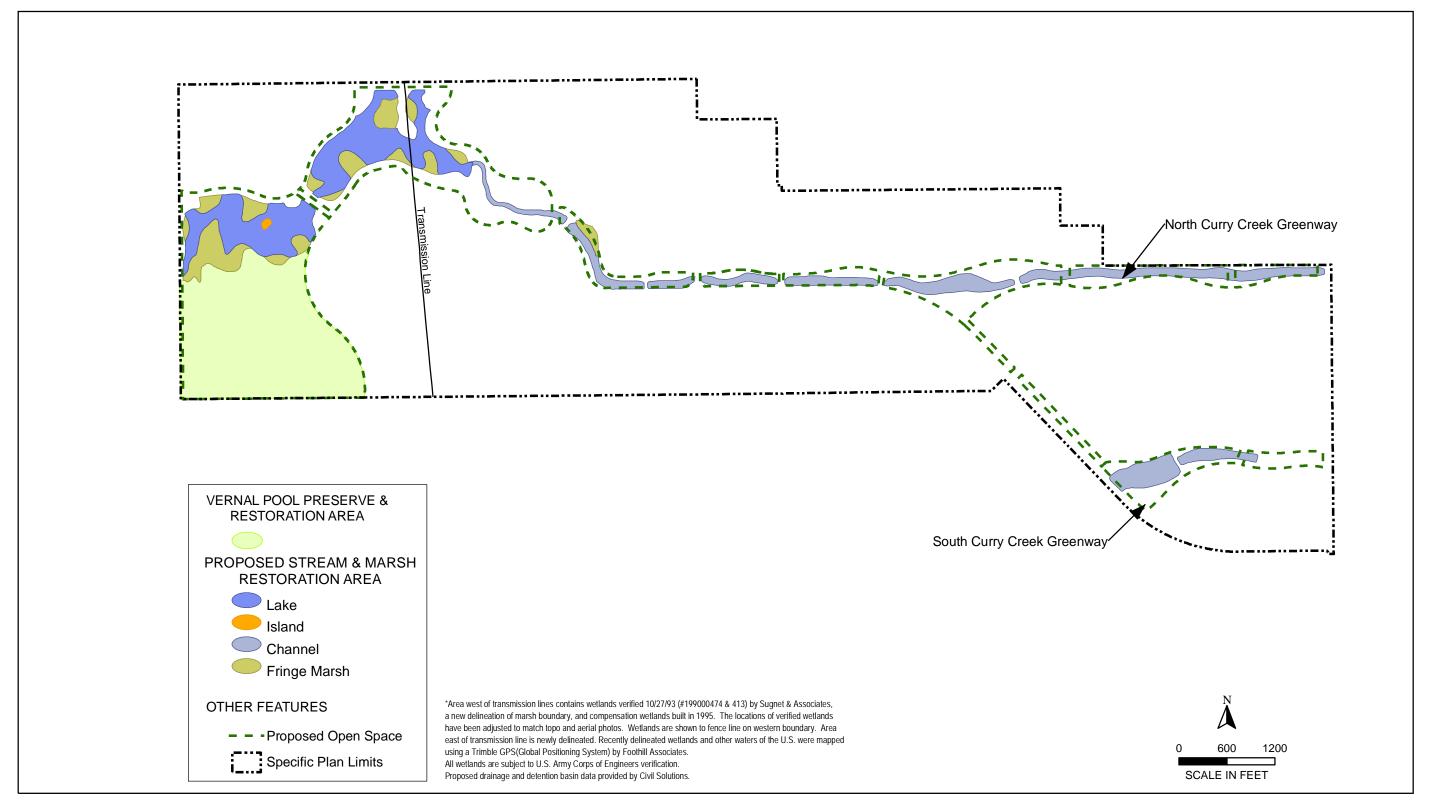


Exhibit 7-4
Wetland Preserve and Compensation/Restoration Areas